

RISER DIAGRAM "A"

STAGE II STEP (I) - SEE DWG #E-6

SCHEDULE STAGE II STEP (I) - TRANSFER LOADS TO BUS #3 & 4

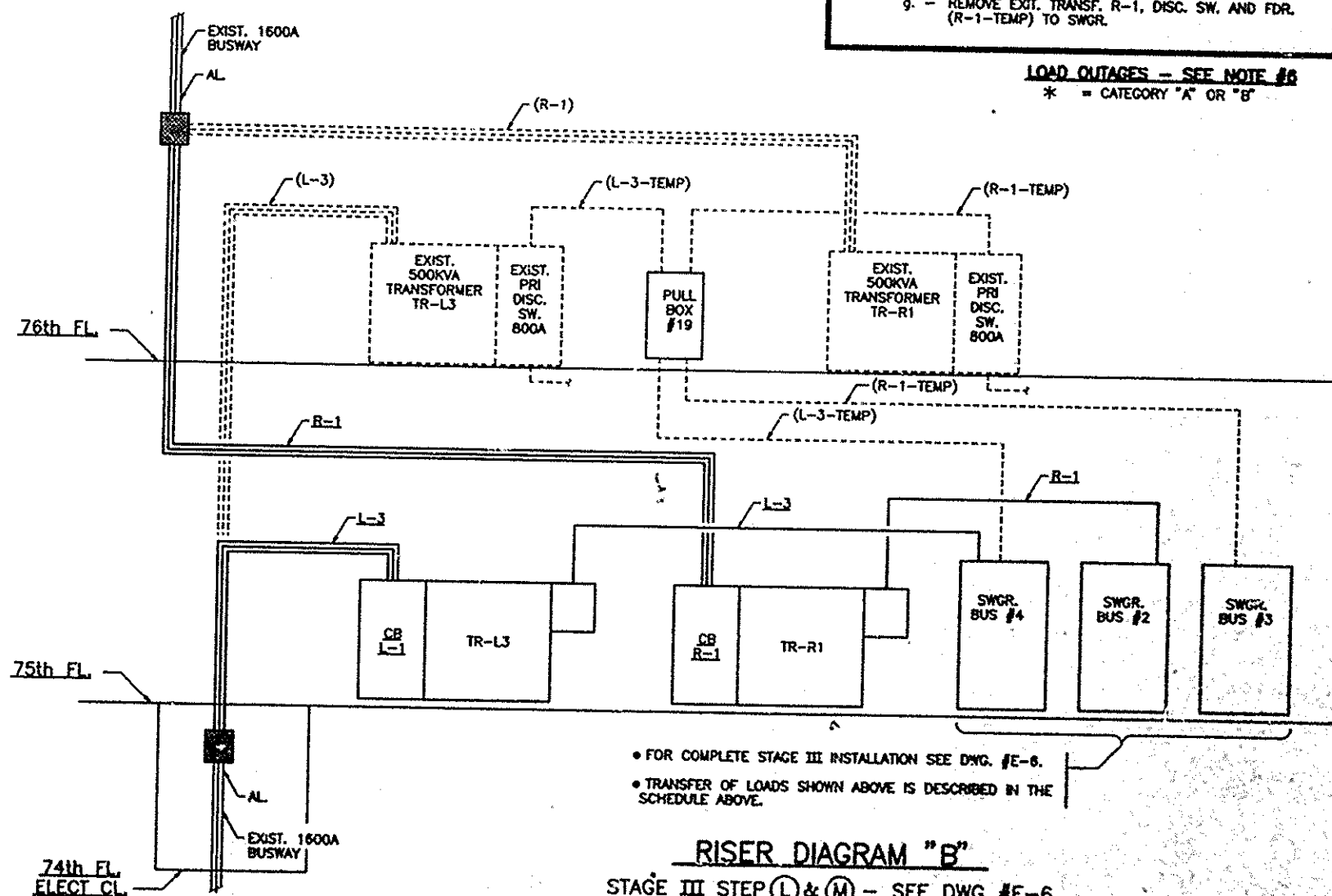
- CONDUIT DESIGNATION - SHUTTLE ELEVATORS -
- CONTROL FOR SHUTTLE & BANK ELEVATORS
- CDS. # C-13, C-15, C-5, & C-15
- a. - INSTALL C CDT & WIRE FROM SHUTTLE & BANK ELEVATOR TRANSFER SWITCHES, AS SHOWN ABOVE
 - b. - CONNECT AL CONTROL WIRES AS SHOWN ON DWG. #E-98 LEGEND
- L-1 NORMAL FEEDER TO SHUTTLE ELEV.
- a. - INSTALL L-1 CDT & WIRE FROM SWGR. BUS #3 TO TRANSFER SWITCH
 - b. - INSTALL CDT. L-1 FROM TRANSFER SWITCH TO POINT OF CONNECTION TO EXIST. CDT.
 - c. - REMOVE EXIST. FDR (L-1) FROM PNL. EL-A-76W BACK TO EXIST. SWGR.
 - d. - CUT EXIST. CDT. (L-1) & REMOVE TO EXIST. SWGR.
 - e. - MAKE CONNECTION TO EXIST. CDT. AND INSTALL FEEDER FROM TRANSFER SWITCH TO PNL. EL-A-76W VIA PULL BOX #16 (ENERGIZE)
- A-2 EMERG. FEEDER TO SHUTTLE ELEV.
- a. - INSTALL A-2 CDT & WIRE FROM TRANSFER SWITCH TO EXIST. PNL. #EPC-75A, VIA P.B. #17 & 12.
 - b. - DISCONNECT EXIST. & CONNECT FDR (A-2) AT PNL. (ENERGIZE)
 - c. - DISCONNECT EXIST. & CONNECT CONTROL WIRING DESIGNATED ON DWG. #E-98.
 - d. - REMOVE EXIST. FDR (A-2) & CONTROL WIRES BACK TO EXIST. ELEV. TRANSFER SWITCH.
- L-7 MOTOR CONTROL CENTER - MCC "C"
- a. - INSTALL L-7 CDT & WIRE FROM SWGR. BUS #4 TO MCC-S-75L (ENERGIZE)
 - b. - DISCONNECT EXIST. & CONNECT FDR L-7 AT MCC-S-75L (ENERGIZE)
 - c. - REMOVE EXIST. FDR & CDT. L-7 BACK TO SWGR.

- 4-3 PANEL DP-75S
- a. - INSTALL 4-3 CDT. & WIRE FROM SWGR. BUS #4 TO PNL. DP-75S.
 - b. - DISCONNECT TEMPORARY & CONNECT FDR. 4-3 AT PNL. (ENERGIZE)
 - c. - REMOVE TEMP. FDR. BACK TO SWGR.
 - d. - INSTALL REMAINDER OF CKT'S IN PANEL DP-75S.
- R-9 PONYA 70th FL. PWR.
- a. - INSTALL R-9 CDT & WIRE FROM SWGR. BUS #4 TO EXISTING PULL BOX #4
 - b. - DISCONNECT EXIST. & CONNECT FDR R-9 AT PULL BOX #4 (ENERGIZE)
 - c. - REMOVE EXIST. FDR R-9 BACK TO SWGR.
- L-3-TEMP 208/120V. TRANSF. ELEC. CLOS. "S" 59-74th FLR'S.
- a. - INSTALL L-3-TEMP CDT & WIRE FROM SWGR. BUS #4 TO 500KVA TRANSFORMER VIA P.B. #19
 - b. - DISCONNECT EXIST. & CONNECT FDR L-3-TEMP AT TRANSFORMER (ENERGIZE)
 - c. - REMOVE EXIST. FDR L-3 BACK TO SWGR.
- R-1-TEMP 208/120V. TRANSF. ELEC. CLOS. "S" 77-92nd FLR'S.
- a. - INSTALL R-1-TEMP CDT & WIRE FROM SWGR. BUS #3 TO 500KVA TRANSFORMER VIA P.B. #19
 - b. - DISCONNECT EXIST. & CONNECT FDR R-1-TEMP AT TRANSFORMER (ENERGIZE)
 - c. - REMOVE EXIST. FDR R-1 BACK TO SWGR.
- L-4b 480/277V. ELEC. CLOS. "S" 59th TO 74th FLR'S
- a. - INSTALL BUSWAY L-4b FROM SWGR. BUS #3 TO END CAP & "T" TO EXIST. BUSWAY L-4.
 - b. - REMOVE EXISTING BUSWAY L-4 TO EXIST. SWGR. REMOVE BACK TO EXIST. SWGR.
 - c. - INSTALL BUSWAY TRANSITION BOX ON EXIST. L-4 BUSWAY & CONNECT BUSWAY L-4b. (ENERGIZE)
- L-4a 480/277V. ELEC. CLOS. "S" FUTURE 67th TO 74th FLR'S
- a. - INSTALL BUSWAY L-4a FROM SWGR. BUS #4 TO END CAP.

LOAD OUTAGES - SEE NOTE #6

* = CATEGORY "A" OR "B"

** = CATEGORY "C"



RISER DIAGRAM "B"

STAGE III STEP (L) & (M) - SEE DWG #E-6

NOTE

- FOR LEGEND SEE DWG. #E-1. FOR GENERAL NOTES AND ABBREVIATIONS SEE DWG. #E-2.
- FOR NUMBER AND SIZE OF CONDUIT & WIRE SEE:
 - DWG. #E-55 - CONDUIT AND CABLE SCHEDULE
 - DWG. #E-98 - A.T.S. CONNECTION DIAGRAM
- SHUTTLE ELEVATORS #13, 15, 17, 19, 21 & 23 WILL BE WITHOUT POWER DURING THIS OUTAGE. SHUTTLE ELEVATORS #12, 14, 16, 18, 20, & 22 FED FROM SUBSTATION SS-75S WILL PROVIDE SERVICE TO THE 74TH FLOOR LOBBY.
- CONDUIT CABLE AND BUSWAY DESCRIBED IN SCHEDULE STAGE II STEP (I) SHALL BE INSTALLED PRIOR TO ENERGIZING BUS #3 & 4.
- SCHEDULE STAGE III STEP (L) & (M) SHALL BE INSTALLED WITH SWITCHGEAR ENERGIZED.
- ALL ELECTRICAL OUTAGES SHALL BE PERFORMED OUTSIDE NORMAL BUILDING OPERATING HOURS. SEE SPECIFICATIONS SECTION 1 ENTITLED "CONDITIONS AND PRECAUTIONS" FOR DESCRIPTION OF ELECTRICAL POWER OUTAGE CATEGORIES.

(SEE NOTE #5)

SCHEDULE STAGE III STEP (L) & (M)

TRANSFER LOADS L-3 & R-1

- L-3 208/120V. TRANSF. ELEC. CLOS. "S" 59-74th FLR'S.
- a. - INSTALL TRANSFORMER "L-3" WITH CB-L3.
 - b. - INSTALL L-3 CDT. & WIRE FROM SWGR. BUS #4 TO TRANSF. "L-3". (CONNECT AT TRANSF.)
 - c. - INSTALL BUSWAY L-3a FROM CB-L3, END AT BUSWAY
 - d. - REMOVE EXIST. BUSWAY TO EXIST. TRANSF. "L-3".
 - e. - INSTALL BUSWAY TRANSITION BOX ON EXIST. BUSWAY & CONNECT BUSWAY L-3a.
- * {
- f. - DISCONNECT EXIST. FDR. L-3-TEMP AND CONNECT FDR. L-3 AT SWGR. (ENERGIZE)
 - g. - REMOVE EXIST. TRANSF. L-3, DISC. SW. AND FDR. (L-3-TEMP) TO SWGR.
- R-1 208/120V. TRANSF. ELEC. CLOS. "S" 77-92nd FLR'S.
- a. - INSTALL TRANSFORMER "R-1" WITH CB-R1.
 - b. - INSTALL R-1 CDT. & WIRE FROM SWGR. BUS #2 TO TRANSF. "R-1". (CONNECT AT TRANSF.)
 - c. - INSTALL BUSWAY R-1a FROM CB-R1, END AT BUSWAY
 - d. - REMOVE EXIST. BUSWAY TO EXIST. TRANSF. "R-1".
 - e. - INSTALL BUSWAY TRANSITION BOX ON EXIST. BUSWAY & CONNECT BUSWAY R-1a.
- * {
- f. - DISCONNECT EXIST. FDR. R-1-TEMP AND CONNECT FDR. R-1 AT SWGR. (ENERGIZE)
 - g. - REMOVE EXIST. TRANSF. R-1, DISC. SW. AND FDR. (R-1-TEMP) TO SWGR.

LOAD OUTAGES - SEE NOTE #6

* = CATEGORY "A" OR "B"

THE PORT AUTHORITY
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TOWER ONE AND TWO
LOW VOLTAGE
SUBSTATIONS
CONSTRUCTION AND
INSTALLATION
ELECTRICAL

SUBSTATION SS-75S
STAGE II & III LOAD
TRANSFER SCHEDULE
AND RISER DIAGRAM

No.	Date	Revision	Appr.
1	5-1-85		

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LEAHY/FISCHER
Designed by LEAHY
Drawn by L.F.
Checked by

Date 5-1-85 Scale AS NOTED

Contract Number WTC 802.071 Drawing Number E-60